

occur throughout Japan (see Blakiston and Pryer, "Birds of Japan," Trans. As. Soc. Japan, 1882).

It has probably been driven out of the parts of China where the common Chinese Crow is abundant. In the Foochow district, where *C. levaillanti* is not plentiful, it has a better chance of existence.

131. *CORVUS TORQUATUS*, Less. [530.]

Common and resident at Foochow and Swatow.

+132. *CORVUS PASTINATOR*, Gould. [531.]

Occurs near Foochow, but seems very scarce. A couple of specimens were shot for me by natives in November and on 22nd February. I never noticed any myself.

N.B.—My shooting-boy told me, on his return from his expedition to Western Kwangtung, that he had seen two birds, which, from his description, appear to have been *Choughs*.

133. *PICA CAUDATA*, Linn. [587.]

Common at Foochow and Swatow. I noticed them building at Lieu-chiang hsien in December.

+134. *GARRULUS SINENSIS*, Gould. [544.]

Very common on the hills near Foochow. Also obtained on the Swatow hills.

+135. *DENDROCITTA SINENSIS* (Lath.). [541.]

Common on Foochow and Swatow hills.

136. *UROCISSA SINENSIS* (Linn.). [539.]

Common at Foochow and Swatow.

[To be continued.]

XXXVI.—*On a Collection of Birds from Mount Dulit, in North-western Borneo.* By R. BOWDLER SHARPE, LL.D., F.L.S., &c.

(Plates X., XI.)

THE very interesting collections made by Mr. John Whitehead on Mount Kina Balu, and described by me in the pages of

this Journal, will have prepared the minds of ornithologists for further discoveries in other high mountains of Borneo. That veteran traveller, Mr. A. H. Everett, has already proved, by the small collection made by him on Mount Pen-risen, that the species of birds procured by Mr. Whitehead on Kina Balu are not all peculiar to that mountain, and now we know that some of them are to be met with in other localities. As will be seen by the present paper, several of the novelties obtained by Mr. Whitehead are also found on Mount Dulit, and for this interesting disclosure science is indebted to the enterprise of a young Englishman, Mr. Charles Hose, who is already known for his collecting work on the Baram River, where he discovered the remarkable new species of *Semnopithecus* which bears his name. The exact position of Mount Dulit does not seem to be marked in any Atlas to which I have had access, but Mr. Hose speaks of it as being situated at the head of the Baram River, and Mr. Whitehead tells me that the chain of which Dulit is one of the peaks was visible to him from the heights of Kina Balu. It is not a little remarkable that some of the Kina-Balu species have recently been obtained by Signor Modigliani in high Sumatra (*cf.* Salvadori, Ann. Mus. Civic. Genov. (2) xii. pp. 40-78). To this paper I refer in the following pages, and I have also quoted Mr. Everett's 'List of Bornean Birds,' and my own essays on the avifauna of Kina Balu. For the sake of convenience of comparison I have followed the order of Mr. Everett's list of Bornean Birds (Journ. Straits Branch Asiat. Soc. 1889, p. 91).

Fam. TURDIDÆ.

1. *GEOCICHLA EVERETTI*.

Geocichla everetti, Sharpe, *anteà*, p. 323.

No. 22. ♀. Dulit, 5000 feet, October.

The specimen is unfortunately not quite adult, but nearly so, and I have Mr. Seebohm's authority for saying that it undoubtedly belongs to a species new to science. It seems to have no very near ally, for though it has the underparts somewhat resembling those of *G. cyanonota*, the brown colour

of the upper surface, the long bill, and the broad black moustache sufficiently distinguish it from all its relations.

2. *MYIOPHONEUS BORNEENSIS*.

Myiophoneus borneensis, Slater; Sharpe, Ibis, 1889, p. 269; Everett, Journ. Straits Branch Asiat. Soc. 1889, p. 98.

No. 41. ♂. Dulit, 5000 feet, October 14.

Discovered first on the mountains of Sarawak, and afterwards obtained on Kina Balu by Mr. Whitehead.

3. *ERYTHACUS CYANEUS*.

Erythacus cyaneus (Pall.); Sharpe, t. c. p. 268; Everett, t. c. p. 98.

Fam. TIMELIIDÆ.

4. *GARRULAX SCHISTOCHLAMYS*.

Garrulax schistochlamys, Sharpe, t. c. p. 411; Everett, t. c. p. 103,

No. 42. ♂ ♀. Dulit, 5000 feet, October.

Iris red. Identical with typical specimens from Kina Balu.

5. *RHINOCICHLA TREACHERI*.

Rhinocichla treacheri, Sharpe, t. c. p. 412; Everett, t. c. p. 103.

No. 47. ♂ ♀ ad. Dulit, 4000 feet, October.

6. *ALLOCOTOPS CALVUS*.

Allocotops calvus, Sharpe, t. c. p. 413, pl. xiii.; Everett, t. c. p. 104.

No. 1. ♂ ♀. Dulit, 5000 feet, October.

Compared with specimens from Kina Balu, and found to be identical.

7. *STACHYRIS BORNEENSIS*.

Stachyris borneensis, Sharpe, t. c. p. 413; Everett, t. c. p. 105.

No. 49. ♂ ♀. Dulit, 4000-5000 feet, October.

8. *ALCIPPE CINEREA*.

Alcippe cinerea, Blyth; Sharpe, t. c. p. 283; Everett, t. c. p. 106.

No. 36. ♂. Dulit, 3500 feet, September 29.

9. *TURDINUS CANICAPILLUS*.

Turdinus canicapillus, Sharpe, t. c. p. 415; Everett, t. c. p. 108.

No. 55. ♂. Dulit, 5000 feet, October.

10. *TURDINULUS EXSUL*.

Turdinulus exsul, Sharpe, t. c. p. 418; Everett, t. c. p. 111.

No. 50. ♀. Dulit, 3000 feet, September 30.

This species was discovered on Kina Balu by Mr. Whitehead, and was afterwards met with by Mr. Everett on Penrisen.

11. *ANUROPSIS MALACCENSIS*.

Anuropsis malaccensis (Hartl.); Sharpe, t. c. p. 418; Everett, t. c. p. 110.

No. 29. ♂. Dulit, 2000 feet, September 26.

Fam. PYCNONOTIDÆ.

12. *HEMIXUS CONNECTENS*.

Hemixus connectens, Sharpe, t. c. p. 273; Everett, t. c. p. 111.

Nos. 33, 34. ♂. Dulit, 3000 feet, October.

Identical with specimens from Kina Balu.

13. *CRINIGER RUFICRISSUS*.

Criniger ruficrissus, Sharpe, t. c. p. 275; Everett, t. c. p. 113.

No. 32. ♂ ♀. Dulit, 3000–4000 feet, September.

14. *RUBIGULA MONTIS*.

Rubigula montis, Sharpe, t. c. p. 276; Everett, t. c. p. 115.

No. 37. ♂ ♀. Dulit, 4000–5000 feet.

15. *CHLOROPSIS KINABALUENSIS*.

Chloropsis kinabaluensis, Sharpe, t. c. p. 272, pl. lx.; Everett, t. c. p. 117.

Three specimens, obtained at a height of 3500 feet, October.

16. *IRENA CRINIGERA*.

Irena crinigera, Sharpe, t. c. p. 277; Everett, t. c. p. 117.

No. 43. ♂ juv. Dulit, 2000 feet, October.

Fam. LANIIDÆ.

17. HEMIPUS PICATUS.

Hemipus picatus, Sykes; Sharpe, t. c. p. 189; Everett, t. c. p. 123.

No. 25. ♂. Dulit, 4000 feet, September.

First met with in Borneo by Mr. Whitehead.

Fam. DICRURIDÆ.

18. CHIBIA BORNEENSIS.

Chibia borneensis, Sharpe, t. c. p. 186; Everett, t. c. p. 123.

No. 44. ♂ ♀. Dulit, 4000 feet, October 9.

No. 44. ♂ ♀. Dulit, 5000 feet, October 15.

Found by Mr. Whitehead on Kina Balu up to 5000 feet.

Fam. CAMPOPHAGIDÆ.

19. ARTAMIDES NORMANI.

Artamides normani, Sharpe, t. c. p. 190; Everett, t. c. p. 124.

No. 3. ♂ ♀ ad. et juv. Dulit, 5000 feet, October.

Identical with Kina-Balu specimens. Mr. Whitehead found it on that mountain at elevations between 3000 and 4000 feet.

20. PERICROCOTUS MONTANUS.

Pericrocotus montanus, Salvad.; Sharpe, t. c. p. 193; Everett, t. c. p. 125; Salvad. Ann. Mus. Civic. Genov. (2) xii. p. 54 (1891).

No. 24. ♂. Dulit, 5000 feet, October.

This is a very curious specimen, not quite adult, as some yellow markings at the base of the secondaries testify. The lower throat is red, not so brilliant as the breast, and only the upper throat is black.

At first sight this specimen would appear to represent a new species of *Pericrocotus*, but I find that *P. montanus* goes through so many variations in the colour of the throat that it is difficult to account for them on the score of age. Mr. Whitehead has kindly brought me several of his Kina-Balu birds to compare with specimens of *P. montanus* from high Sumatra, for the loan of which I am indebted to

Count Salvadori. They are undoubtedly identical, and two males which the latter gentleman sent me have the throat black and dark slate-colour respectively, while the third has a slaty-grey throat, with the lower part mixed with red. I find that Count Salvadori is quite right in uniting *P. wrayi* with *P. montanus*, and it is possible, as he suggests, that *P. cinereigula* may likewise have to be added as a synonym, but I cannot make up my mind to adopt this course at present. Mr. Whitehead has allowed me to re-examine the type, and I find that my remarks on it are still justified, but neither he nor I have now much confidence in the species.

Fam. MUSCICAPIDÆ.

21. RHINOMYIAS RUFICRISSA.

Rhinomyias ruficrissa, Sharpe, t. c. p. 200; Everett, t. c. p. 131.

No. 35. ♂. Dulit, 3500 feet, October.

No. 35. ♀. Dulit, 5000 feet, October.

22. CULICICAPA CEYLONENSIS.

Culicicapa ceylonensis (Sw.) ; Sharpe, t. c. p. 202; Everett, t. c. 131.

No. 40. ♂ ♀ ad. Dulit, 3000 feet, September 22 and October 9.

23. SIPHIA BECCARIANA.

Siphia beccariana (Salvad.) ; Sharpe, Cat. B. Brit. Mus. iv. p. 452; Everett, t. c. p. 133.

No. 33. ♂. Dulit, 3000 feet, October.

This bird was not procured by Mr. Whitehead on Kina Balu, but Mr. Everett has recently obtained a specimen at the foot of Song Mountain, in the Baram district.

Fam. NECTARINIIDÆ.

24. ÆTHOPYGA TEMMINCKI.

Æthopyga temmincki (S. Müll.) ; Sharpe, Ibis, 1889, p. 421; Everett, t. c. p. 135.

No. 51. ♂ ♀. Dulit, 3500-4700 feet, September.

25. ARACHNOTHERA JULIÆ.

Arachnothera juliae, Sharpe, t. c. p. 424; Everett, t. c. p. 138.

No. 38. ♂ ♀. Dulit, 5000 feet, October.

Agrees exactly with Kina-Balu examples.

26. ARACHNOTHERA LONGIROSTRIS.

Arachnothera longirostris (Lath.); Sharpe, t. c. p. 426; Everett, t. c. p. 137.

No. 39. ♂. Dulit, 3000 feet, October.

Fam. DICÆIDÆ.

27. PRIONOCHILUS MACULATUS.

Prionochilus maculatus (T.); Everett, t. c. p. 140.

No. 20. ♀ ad. Dulit, 4000 feet, October.

Not found by Mr. Whitehead.

28. PRIONOCHILUS XANTHOPYGIUS.

Prionochilus xanthopygius, Salvad.; Sharpe, t. c. p. 430; Everett, t. c. p. 140.

No. 52. ♂. Dulit, 3500 feet, September 24.

Mr. Whitehead procured specimens of this species on the Lawas River, but did not meet with it on Kina Balu.

Fam. ZOSTEROPIDÆ.

29. ZOSTEROPS SQUAMIFRONS.

Zosterops squamifrons, Sharpe, *antèa*, p. 323.

No. 53. ♂. Dulit, 3500 feet, September 20.

I took much trouble to determine the proper place to put this little bird, and after comparing it with many forms, especially the genera of *Liotrichinæ*, I came to the conclusion that it must be an aberrant kind of *Zosterops*, with which genus it agrees in the shape of the bill and wing. The only species in the genus which it at all resembles is *Z. javanica*, but the latter is a larger bird, much more yellow above, and bright yellow below.

Fam. CORVIDÆ.

30. DENDROCITTA CINERASCENS.

Dendrocitta cinerascens, Sharpe, t. c. p. 81; Everett, t. c. p. 146.

No. 45. ♂ ♀. Dulit, 3000–5000 feet, October.

Found on Kina Balu by Mr. Whitehead from 1000–9000 feet.

31. CISSA JEFFERYI.

Cissa jefferyi, Sharpe, t. c. p. 84, pl. iv.; Everett, t. c. p. 146.

No. 2. ♂. Dulit, 5000 feet, October.

Apparently quite similar to examples from Kina Balu. Mr. Whitehead met with it on the latter mountain at altitudes of 3000–8000 feet.

Fam. PITTIDÆ.

32. PITTA ARCUATA.

Pitta arcuata, Gould; Sharpe, t. c. p. 441; Everett, t. c. p. 148.

No. 20. ♂ ♀ ad. Dulit, 4000 feet, October.

No. 21. ♂ jr. Dulit, 4000 feet, October.

The young bird is dusky above, with a slight olive tinge, with a little greenish blue on the scapulars and wings, and also along the sides of the hinder crown; the sides of the face dusky brown; throat pale ochreous, mottled with greyish bases to the feathers; breast dusky brown, slightly washed with ochreous brown; sides of body ochreous, with a rosy tinge, inclining to scarlet on the lower flanks, and a few bright scarlet feathers appearing on the sides of the breast; under tail-coverts scarlet; lower abdomen pale rosy.

33. PITTA SCHWANERI.

Pitta schwaneri, Temm.; Sharpe, t. c. p. 442; Everett, t. c. p. 149.

No. 23. Dulit, 4000 feet, October.

Fam. EURYLÆMIDÆ.

34. CALYPTOMENA HOSII. (Plate X.)

Calyptomena hosii, Sharpe, Ann. & Mag. Nat. Hist. (6) ix. p. 249 (1892).

Nos. 15, 16. ♂, ♀. Dulit, 3000 feet, September and October.

This beautiful new species, which, by the kindness of the Editor, I am allowed to have figured, is the most interesting of Mr. Hose's discoveries on Mount Dulit. It is larger than *C. viridis*, but is not so big as *C. whiteheadi*, and is, of course, distinguished from both by the blue breast. The remarkable blue upper tail-coverts appear to be hidden by the thick-set plumage of the rump, and they might easily escape observation altogether. In fact it was only when I came to make a careful examination of the specimens that I discovered them at all.

Mr. Everett likewise obtained a female of this species in October at the foot of Song Mountain, in the Baram district, a few days after Mr. Hose had met with it on Mount Dulit. His specimen was a female, but appears to be a little older than the one procured by Mr. Hose. The black spots on the wing-coverts are more marked, and the blue of the breast is brighter, though not approaching the rich cobalt-blue of the male.

I cannot allow this opportunity to pass without acknowledging the rare generosity with which my old friend Mr. Everett (who knows Bornean birds as well as anyone in the world, and who was perfectly well aware that the present species was quite new) allowed the specimens to come unnamed to England, in order that I might have the privilege of describing this splendid novelty.

35. EURYLÆMUS OCHROMELAS.

Eurylæmus ochromelas, Horsf.; Sharpe, Ibis, 1889, p. 439; Everett, t. c. p. 150.

No. 14. ♀. Dulit, 2500 feet.

Fam. PICIDÆ.

36. MIGLYPTES TUKKI.

Miglyptes tukki (Less.) ; Sharpe, Ibis, 1890, p. 9 ; Everett, t. c. p. 158.

No. 18. ♀ . Dulit, 3000 feet.

Fam. ALCEDINIDÆ.

37. HALCYON CONCRETA.

Halcyon concreta (Temm.) ; Sharpe, Ibis, 1890, p. 21 ; Everett, t. c. p. 161.

No. 19. ♀ . Dulit, 4000 feet.

Fam. CAPRIMULGIDÆ.

38. BATRACHOSTOMUS HARTERTI.

Batrachostomus harterti, Sharpe, *antea*, p. 323.

No. 17. ♂ . Dulit, 2000 feet, October.

I have already (*l. c.*) given the characters of this species, which I have named after my friend Mr. Hartert, who has recently performed the arduous task of describing the Caprimulgidæ in the 'Catalogue of Birds.' The bird has been figured in that work (vol. xvi. pl. 14).

39. BATRACHOSTOMUS AFFINIS.

Batrachostomus affinis, Blyth ; Hartert, Cat. B. Brit. Mus. xvi. p. 643 (1892).

No. 56. ♂ . Marudi, in the Baram district, in August.

Mr. Hartert has identified this specimen for me. The species is new to Borneo.

Fam. TROGONIDÆ.

40. HARPACTES WHITEHEADI.

Harpactes whiteheadi, Sharpe, Ibis, 1890, p. 2 ; Everett, t. c. p. 166.

No. 5. ♂ ♀ . Dulit, 5000 feet, October.

A pair of birds not quite adult, but evidently of the same species as the Kina-Balu bird.

41. *HARPACTES DULITENSIS.*

Harpactes dulitensis, Ogilvie Grant, Cat. B. Brit. Mus. xvii. p. 501, pl. 17.

No. 6. ♂. Dulit, 4000 feet.

A pair of birds was sent by Mr. Hose, and they have been described by Mr. Ogilvie Grant, who has been recently working out the Trogons. Mr. Whitehead has very kindly shown me again some of the specimens which he procured on Kina Balu, and which were named by me *H. oreskios*. This identification turns out to have been quite correct, and it is interesting to find a distinct species on Mount Dulit, when so much of its avifauna is the same as that of Kina Balu.

42. *HARPACTES VIDUA.*

Harpactes vidua, Ogilvie Grant, Cat. B. Brit. Mus. xvii. p. 501.

Mr. Whitehead obtained on Kina Balu a similar bird to the one described by Mr. Ogilvie Grant, as will be seen by his note (*Ibis*, 1890, p. 4). Although I was unable at the time to identify the species, I did not like to describe it as new on the strength of a single female, and that apparently an immature one.

Fam. CAPITONIDÆ.

43. *CHOTORHEA CHRYSOPSIS.*

Megalæma chrysopsis, Goff. ; Sharpe, *Ibis*, 1890, p. 4 ; Everett, t. c. p. 167.

Chotorhea chrysopsis, Shelley, Cat. B. Brit. Mus. xix. p. 59. No. 9. ♂ juv. Dulit, 4000 feet, October.

44. *CYANOPS MYSTACOPHANUS.*

Megalæma mystacophanus (Temm.) ; Sharpe, *Ibis*, 1890, p. 4 ; Everett, t. c. p. 167.

No. 12. ♂ ad., ♀ juv. Dulit, 2000 feet, September 29.

45. *CYANOPS MONTICOLA.*

Cyanops monticola, Sharpe, *Ibis*, 1890, p. 5 ; Everett, t. c. p. 68.

Nos. 8, 10. Dulit, 4000 feet, September.

The young bird differs from the adult in being everywhere duller, with the bright colours of the head less developed, and the red patch on the nape scarcely visible. The red spot on the sides of the lower throat is also nearly obsolete.

Although this species bears such a strong resemblance to the young of *M. mystacophanes*, the shape of the bill is quite different, being both shorter and stouter and having a more acute chin-angle.

46. MESOBUCCO EXIMIUS. (Plate XI.)

Mesobucco eximius, Sharpe, *antèa*, p. 324.

No. 13. Dulit, 3500 feet, September 29.

At first sight this Barbet resembles the species of the genus *Xantholaema*. It is coloured after the fashion of the members of that genus, but it is distinguished from all of them by its black throat, while the form of bill is that of *M. duvauceli*. The figure will show how distinct the species really is.

Fam. CUCULIDÆ.

47. ZANCLOSTOMUS JAVANICUS.

Zanclostomus javanicus (Horsf.): Sharpe, *Ibis*, 1890, p. 13; Everett, t. c. p. 175.

No. 46. ♀. Dulit, 3000 feet, September.

Fam. STRIGIDÆ.

48. HETEROSCOPS LUCIÆ.

Heteroscops lucie, Sharpe, *Ibis*, 1889, p. 77, pl. iii.; Everett, t. c. p. 178.

No. 26. ♀. Dulit, 5000 feet, October 10. Iris yellow.

This interesting species was discovered by Mr. Whitehead on Kina Balu.

Fam. COLUMBIDÆ.

49. CARPOPHAGA BADIA.

Carpophaga badia (Raffles); Sharpe, *Ibis*, 1890, p. 35; Everett, t. c. p. 195.

In Mr. Hose's first collection from Mount Dulit.

50. *CHALCOPHAPS INDICA*.

Chalcophaps indica (L.) ; Sharpe, *Ibis*, 1890, p. 136 ; Everett, t. c. p. 194.

No. 48. Juv. Dulit, 4500 feet, October.

Fam. PHASIANIDÆ.

51. *LOBIOPHAPS BULWERI*.

Lobiophaps bulweri, Sharpe ; Everett, t. c. p. 198.

Several specimens of this fine Pheasant from Mount Dulit. Mr. Everett has also sent the egg, which is of a pale stone colour, and measures, axis 1·5 inch, diam. 1·6.

XXXVII.—*On the Rudimentary Hallux of the Kittiwake*
(*Rissa tridactyla*). By W. EAGLE CLARKE, F.L.S.

THE literature relating to our knowledge of the rudimentary hallux of the so-called three-toed birds is, I believe, not of a very extensive nature. Nor has the hind toe of the species under consideration received much attention. These facts must be my excuse for placing the following slight notes on record.

It is scarcely necessary to remark that the genus *Rissa* was founded by Leach mainly upon the rudimentary nature, or absence, of the hallux. This toe appears to be a variable quantity in the two species belonging to the genus, and is most developed in the race of the common species which inhabits the Pacific Region. This race has, mainly or entirely on this account, been promoted to subspecific rank by the American ornithologists under the name of *Rissa tridactyla pollicaris*. Even in this race, however, the development of the hallux would appear to be a variable character.

Regarding the status and appearance of the hind toe of the Common Kittiwake (*Rissa tridactyla*) little need be said here, since the published accounts of various ornithologists are so well known and so readily accessible.

The summer cruise, in 1891, of the yacht 'Shiantelle,' thanks to the kindness of my friend Mr. Harvie-Brown, enabled me to obtain a series of embryos in various stages of





J. G. Keulemans del. et lit.

U. S. National Museum

MESOBUCCO EXIMIUS